IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface; and

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material,

wherein the micro-bodies are partly buried in the metal plating layer.

Claim 2 (Original): The device according to claim 1, wherein the metal plating layer comprises a resistance ballast layer containing an additive material, which increases a resistance of the metal plating layer.

Claim 3 (Original): The device according to claim 2, wherein the metal plating layer has a resistivity of 10^{-8} Ωm to 10^{-4} Ωm.

Claims 4-5 (Canceled).

Claim 6 (Original): The device according to claim 1, wherein the micro-bodies are granular bodies and have a radius of not more than 100 nm.

Claim 7 (Original): The device according to claim 1, wherein the micro-bodies are rod-shaped bodies and have distal ends with a radius of curvature of not more than 50 nm.

Claim 8 (Original): The device according to claim 1, wherein the micro-bodies are rod-shaped bodies, and 50% to 100% of the micro-bodies are oriented within an angular range of ± 20° relative to a major surface of the support substrate, where the cathode electrode is disposed.

Claim 9 (Original): The device according to claim 1, wherein the micro-bodies are rod-shaped and hollow bodies, and a filler layer consisting essentially of a conductive material is disposed in the micro-bodies.

Claim 10 (Original): The device according to claim 1, further comprising a gate projection disposed on the second side surface to oppose the first side surface, the gate projection comprising a gate metal plating layer consisting essentially of the same material as that of the metal plating layer, and a plurality of gate micro-bodies supported in the gate metal plating layer in a dispersed state and consisting essentially of the same material as that of the micro-bodies.

Claim 11 (Original): The device according to claim 1, further comprising a surrounding member cooperating with the support substrate to form a vacuum discharge space that surrounds the cathode electrode, the gate electrode, and the emitter, and an anode

electrode disposed on the surrounding member at a position opposing the cathode electrode and the gate electrode.

Claim 12 (Currently Amended): A vacuum micro-device comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface;

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of carbon nanotubes supported in the metal plating layer in a dispersed state, the carbon nanotubes being partly buried in the metal plating layer;

a surrounding member cooperating with the support substrate to form a vacuum discharge space that surrounds the cathode electrode, the gate electrode, and the emitter; and

an anode electrode disposed on the surrounding member at a position opposing the cathode electrode and the gate electrode.

Claim 13 (Currently Amended): The device according to claim 12, wherein the surrounding member comprises a transparent opposite substrate opposing the support substrate, and the anode electrode comprises a transparent electrode and a fluorescent layer [[are]] disposed on the opposite substrate in the vacuum discharge space.

Claim 14 (Original): The device according to claim 12, wherein the metal plating layer comprises a resistance ballast layer containing an additive material, which increases a resistance of the metal plating layer.

Claim 15 (Original): The device according to claim 14, wherein the metal plating layer has a resistivity of 10^{-8} Ωm to 10^{-4} Ωm.

Claim 16 (Original): The device according to claim 12, wherein 50% to 100% of the carbon nanotubes are oriented within an angular range of ± 20° relative to a major surface of the support substrate, where the cathode electrode is disposed.

Claim 17 (Original): The device according to claim 12, further comprising a gate projection disposed on the second side surface to oppose the first side surface, the gate projection comprising a gate metal plating layer consisting essentially of the same material as that of the metal plating layer, and a plurality of carbon nanotubes supported in the gate metal plating layer in a dispersed state.

Claims 18-20 (Canceled).

Claim 21 (New): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface; and

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes,

carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material,

wherein the metal plating layer comprises a resistance ballast layer containing an additive material, which increases a resistance of the metal plating layer, and

wherein the metal plating layer has a resistivity of 10^{-8} Ωm to 10^{-4} Ωm.

Claim 22 (New): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface; and

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material,

wherein the micro-bodies are entirely buried in the metal plating layer.

Claim 23 (New): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface; and

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material,

wherein the micro-bodies are rod-shaped bodies, and 50% to 100% of the micro-bodies are oriented within an angular range of ± 20° relative to a major surface of the support substrate, where the cathode electrode is disposed.

Claim 24 (New): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface; and

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material,

wherein the micro-bodies are rod-shaped and hollow bodies, and a filler layer consisting essentially of a conductive material is disposed in the micro-bodies.

Claim 25 (New): A field emission cold cathode device of a lateral type comprising:

a support substrate;

a cathode electrode disposed on the support substrate and having a first side surface;

a gate electrode disposed on the support substrate laterally side by side with the cathode electrode and having a second side surface opposing the first side surface;

an emitter disposed on the first side surface to oppose the second surface, the emitter comprising a metal plating layer formed on the first side surface and a plurality of granular or rod-shaped micro-bodies supported in the metal plating layer in a dispersed state, the micro-bodies consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material; and

a gate projection disposed on the second side surface to oppose the first side surface, the gate projection comprising a gate metal plating layer consisting essentially of the same material as that of the metal plating layer, and a plurality of gate micro-bodies supported in the gate metal plating layer in a dispersed state and consisting essentially of the same material as that of the micro-bodies.